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Stainless Steel in Sweden

Antidumping Attacks Good International Citizenship

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Swedish stainless steel has played by the rules — private ownership, competitive pricing, government support strictly within the GATT rules, and the OECD guidelines. But when Sweden refused to “voluntarily” restrict its exports, it was severely set upon through antidumping actions

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This paper — a product of the Trade Policy Division, Country Economics Department — is part of a larger effort in PRE to understand the economics of the emergence of “fairness” as a standard for regulating international trade, its implications for the continued openness of the international trading system, and its continued functioning as an important vehicle for development. Copies are available free from the World Bank, 1818 H Street NW, Washington, DC 20433. Please contact Nellie Artis, room N10-013, extension 37947 (43 pages, including tables).

Fors argues that good economics, international competitiveness, private ownership, and limited support from a government demonstrating good international citizenship are not enough to defend an industry against the application of antidumping or other import-restricting policy.

The Swedish stainless steel industry responded to the world crisis in the steel market in the 1970s with major industrial restructuring. By wholeheartedly applying the principle of profitability to decisionmaking, the industry transformed itself into a healthy, internationally competitive industry. Today the two remaining stainless steel firms in Sweden are among the world leaders in their fields and are the world's largest producers of some stainless steel products.

During this transformation, stainless steel firms also learned to get along without government intervention. After 1982, the government's policy toward the industry changed. The government ended all direct support to the industry in 1982 and by the end of 1987 stainless steel firms had paid back all of their structural delegation loans dating from the late 1970s. In addition, the Swedish government — in complying with OECD criteria guiding national steel policy — demonstrated better international citizenship than either the United States or the European Community. The negative findings of the U.S. countervailing duty and section 301 cases against Sweden offered further support that the Swedish government's role in the stainless steel industry

was clearly within the bounds of the international understanding of what that role should be.

Producers in the United States, meanwhile, were shopping around for ways to restrict imports of Swedish stainless steel products. They actively sought protection under every available provision of U.S. trade laws. Efforts under section 301 and countervailing duty laws failed, but their claims under section 201 resulted in the imposition of quotas and additional tariffs covering most stainless steel products for over ten years. Those under antidumping provisions resulted in the imposition of duties that are still in effect for stainless steel plate (Avesta), welded tubes (Avesta-Sandvik Tube), and seamless tubes (Sandvik Steel). This extensive use of trade remedy cases against Swedish stainless steel is not an aberration but rather an illustration of how the system generally works.

On the Sandvik steel antidumping case, Sweden complained to the GATT, which established an antidumping panel to investigate the case. The panel's recommendation that the antidumping order be lifted was based not on a consideration of the broad issue of whose position was right from a rational economic or business perspective, but on a procedural detail. Just as “dumping” is whatever a domestic industry can get its government to act against under antidumping law, concludes Fors, so “not dumping” is whatever a GATT panel cites as grounds to discredit an antidumping order.

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**The Stainless Steel Industry in Sweden:
Successful Adjustment and Responsible International Citizenship**

Gunnar Fors

With a population of only 8 million people, Sweden has a small domestic market for its production. Swedish industries prosper by focusing on high-quality products for the world market -- stainless steel tubes for nuclear power stations or stainless steel for surgical instruments, for example. Many Swedish firms are among the world's industrial leaders in metals, machinery, and electrical equipment. Sweden's highly skilled and educated management and labor force and an excellent infrastructure have been important factors contributing to this success.

Over time, Swedish industries have defended their position on the world market by moving on to more sophisticated products. Before the industrial revolution in the nineteenth century, Sweden was the world's largest iron and steel producer and exporter, thanks to its abundance of the necessary natural resources -- high-quality iron ore, forests, and hydropower. High-grade iron and steel became Sweden's first important exports. Eventually, high-grade steels, such as stainless, became a larger part of the steel industry. Later, Sweden moved into higher-value stainless steel varieties, such as material for surgical instruments.

Stainless steel is a good example of the leading-edge of Swedish industry. Compared with the stainless steel industry in other countries, the industry in Sweden is characterized by higher-grade products and a stronger export orientation. A good measure of Sweden's concentration on high-grade stainless products is the export price level: according to a report by the Organization for Economic Cooperation and Development (OECD 1981), Sweden had the highest export prices for most categories of stainless steel products among the major producing countries.

Stainless and other high-grade steels have played an important role in the development of the Swedish manufacturing industry as well. Many successful Swedish firms of today had their origins in the old iron and steel firms, some dating back several hundred years. As the steel industry diversified into more

highly processed steel products in the nineteenth century, an advanced manufacturing industry emerged, transforming Sweden from an agrarian to an industrial country. The Swedish engineering industry, which emerged from various metal-working industries, is a prime example of this evolutionary process. Today, it accounts for almost half of Sweden's manufacturing industry and well over half of its manufactured exports.

The impact of the stainless steel industry on Sweden's industrial development has been far-reaching, despite the relatively small number of people employed by the industry -- about 9,000, or 1.2 percent of the total Swedish industrial labor force (Swedish Institute 1989 and Jernkontoret internal report 1990). Two privately owned firms, Avesta and Sandvik Steel, make up the Swedish stainless steel industry today. The firms are competitive internationally and are the world's largest producers for certain stainless steel products. Both firms are strongly export oriented and have production facilities in several countries. Government support to the industry has been limited and within the bounds of the international "understanding" on government involvement in national steel industries. Stainless steel firms have received no government loans or credit guarantees since 1979 and no government support of any kind since 1984. Yet both Avesta and Sandvik Steel are currently under U.S. antidumping orders.

Swedish stainless steel products have been subject to extensive U.S. import restrictions since the mid-1970s, which, perhaps not coincidentally, was also a period of crisis for the steel industry worldwide. These restrictions have taken many forms -- antidumping orders, import quotas, general import tariffs, and additional import tariffs. They have not only restricted Swedish exports directly, but they have also done so indirectly through their substantial administrative costs and their general harassment effects in creating a climate of uncertainty for Swedish stainless steel exports.

The experience of the Swedish stainless steel industry with U.S. trade remedies actions suggests that an industry following good economic principles

is not immune to the forces seeking antidumping and other forms of protection -- not even if that industry is privately owned, internationally competitive, and receives very limited support from a government demonstrating good international citizenship.

This chapter looks at how and why this happened and argues that the Swedish case is not an aberration but rather a normal example of the trade remedies process at work. It examines the steel crisis of the 1970s and the emergence of the Swedish stainless steel industry from that crisis as a leaner, stronger international competitor. It looks also at the role of the Swedish government in the industry's adjustment process and at the government's diminishing involvement in the sector. Finally, it considers the protectionist response of the U.S. steel industry to Swedish import competition, concluding that antidumping and other trade remedies cases had nothing to do with whether Swedish or U.S. firms were acting "correctly" in any meaningful economic or business sense. Rather, these cases demonstrate that "dumping" has been operationally defined as whatever actions the domestic industry can get the government to act against under antidumping law.

The steel crisis

The steel crisis began in 1975, with a drastic fall in world steel demand, and did not end until the middle of the 1980s. The crisis emerged during the world recession that followed the sharp rise in oil prices in 1974, throwing the whole world into a long period of slow economic growth. The steel industry had just experienced two years of booming growth in 1973 and 1974 and had responded to optimistic projections for the future with high levels of investment. At the beginning of the 1970s, some observers had even predicted a coming steel shortage. They could not have been more wrong.

Unmasking the changes in competitive conditions

The steel crisis unmasked the changes in competitive conditions that had been taking place over a long period of rapid growth. Before 1975, growth in demand and prices had been so high that even inefficient firms were able to make a profit. After 1975, however, there was a mismatch between demand and supply (capacity) that caused prices to fall. Inefficient firms were no longer able to make a profit.

The increased competition that had gradually been building in response to important changes in the world market finally became apparent during the crisis. The lowering of international trade barriers under the General Agreement on Tariffs and Trade (GATT) and advances in lower-cost transport had increased competition in the market. New producers had emerged, and many of them, particularly those in Japan and South Korea, had new, modern plants with lower production costs than traditional U.S. and European producers. With a greater number of producers willing and able to bid on steel contracts, prices were forced downward.

Thus for older firms, the return to profitability was a much more complicated matter than simply waiting for world demand to pick up or modernizing old-fashioned plants. The Swedish stainless steel industry was strongly affected by these changes in competitive conditions. In addition, the Swedish industry had two other factors to contend with: its labor costs had increased relative to costs in the rest of the world, and economies of scale in stainless steel production had increased, which put Swedish firms, with their small plant size, at a competitive disadvantage.

Fall in demand

In 1975, demand for steel changed in two ways: the level of demand dropped dramatically -- world consumption fell by 10 percent from its 1974 level -- and growth in demand (as steelmakers would eventually realize) had virtually disappeared. It would take 10 years, until 1984, for world demand to recover from that 10 percent drop in 1975 (Messerlin 1987).

From 1945 to 1974, world production of steel grew at an average annual rate of 5-6 percent.¹ Growth rates were even higher for the Swedish stainless steel industry in the boom years of 1973 and 1974 (Inco 1981). Then, growth in world steel production virtually stopped, averaging zero percent over the period 1975 to the mid-1980s, (Fritz 1988), and did not pick up again until the second half of the 1980s. The pre-1975 growth rates were never reached again.² For stainless steel, annual world growth during this period dropped to 1-2 percent (Inco 1981, 1990).

Sweden was especially hard hit by the crisis, with stainless steel production falling by 37 percent between 1974 and 1977, compared with less than one percent, on average, for the other major producers (Inco 1981). Employment in the specialty steel sector fell by 13 percent.³ The crisis that began in 1975 was a longer and deeper cyclical downturn than Sweden had ever experienced before.

Increased capacity

While demand was falling, capacity was expanding, creating the other dimension of the crisis. Capacity had expanded rapidly during the 1930s, 1940s, and 1950s to meet the huge demand for steel created by the war and by post-war reconstruction. Finally, by the end of the 1950s, demand and capacity were in balance (Pettersson 1968). By the mid-1960s, however, a condition of chronic excess capacity began to emerge, and by 1975, the gap widened as demand fell. The entire world steel industry faced a major structural problem. By 1977, the Swedish steel industry was producing at only about half of its capacity.⁴

Capacity in the Swedish stainless steel industry continued to expand even after 1975. One reason for the continued expansion was the long time lag between investment decisions and the completion of construction projects. Much of the increased capacity was the result of investment decisions that had been made before the economic downturn. In any case, producers and governments

believed that the cyclical downturn was only temporary, so investments were geared toward a continuation of the high growth rates of the past.

Other economic forces were also at work, pushing for increased expansion. Lower-grade steel producers wanted to move up to higher-grade products such as stainless because profits were higher. Firms were also eager to invest in new equipment because of the rapid rate of increase in energy and labor costs compared to capital costs during the 1970s. And new economies of scale and economies arising from new technologies made modern production equipment more productive and cost efficient. Replacing or upgrading old equipment automatically raised capacity without a corresponding increase in cost (OECD 1981).

And finally, many new producers of stainless steel were emerging in the 1970s, and their countries were becoming less dependent on imports. Many developing countries had built steel plants as the "flagships" of their industrial development in the 1950s and 1960s, and a move into stainless steel was the next step on their path to industrialization. New shipping methods and depressed shipping prices in the 1970s lowered transportation costs, enabling Japan and other Asian countries to become exporters despite the long distances to export markets and the need to import raw materials.

Adjustment in the Swedish stainless steel industry

In 1982, the stainless steel firms and the Swedish government initiated a series of discussions and negotiations directed at finding a long-term solution for the industry, which by that time had reached the most serious point in the crisis. The industry emerged from that process fully committed to profitability as the guide to decisionmaking. The stainless steel firms began to ask, "Where and how can we make a profit?", instead of "How can we maintain our position within the industry?". Firms demonstrated a new willingness to cast off their traditions, to forsake their historical product-process identity, and even to drop out of the stainless steel industry if that made

economic sense. The firms abandoned much of their identity as individual firms and instead looked objectively at the industry's total production units in Sweden, combining or closing them as needed to ensure profitability. Once profitability replaced tradition as the guide to decisions, finding a solution to the crisis was possible.

Adjustment in the Swedish stainless steel industry during 1974-84 involved drastic changes, followed by similar but less intensive changes thereafter (tables 9.1 and 9.2). A report by the United Nations described the process in these words:

The Swedish private steelmaking sector has rationalized and restructured its operations through mergers.... These mergers are typical of the pattern of rationalization that has brought a single leading producer for each of the key specialty steel [including stainless steel] products.... In many respects, Sweden has led the way in restructuring both the ordinary carbon steel and the specialty steel [including stainless steel] sectors in order to maintain their profitability and improve their efficiency in the face of international competition. One feature of rationalization has been a move towards larger production units in an economy once characterized by many small steel plants (United Nations 1989, 83).

Four trends characterized this adjustment process:

- *Fewer decisionmakers.* In 1974, six firms controlled the industry; by 1984, only two firms did (table 9.1).
- *Fewer production lines.* The total Swedish output of each stainless steel product was produced with fewer production lines.⁵ Thus, for example, wire-rod was produced with three production lines in 1974, but only one in 1984 (table 9.2).
- *Fewer firms per product.* The total Swedish output of each stainless steel product was produced by fewer firms. Welded tubes, for example, were produced by five firms in 1974 but by only one in 1984 (table 9.2).

■ **Fewer employees.** Employment in the stainless steel industry fell by more than 40 percent between 1974 and 1984, and continued to fall until 1989, but not by as much. (Employment fell by roughly 50 percent between 1974 and 1989.⁶)

Adjustment before 1982

In 1974, the Swedish stainless steel industry consisted of six firms: Avesta, Fagersta, Granges-Nyby, Sandvik, Stora-Kopparberg,⁷ and Uddeholm. The ownership structure of the industry was fragmented, in some cases dating back hundreds of years, making it difficult to introduce change. Tradition guided most activities. With the industry's capacity divided into numerous, small-scale production lines, there was excess capacity overall, and an inefficient duplication of activities. Each firm produced a wide range of products, from simple standard products to the most sophisticated. Before the crisis, demand was so high that all firms could make a profit, even if they were inefficient. Once the crisis set in in 1975, this was no longer possible. As Claes-Ulrik Winberg, the chairman of the Swedish Employers Confederation during the 1980s, remarked in 1976, "What I find extraordinary is that each of the steel firms apparently finds steel-boiling so amusing that, during long periods, they almost entirely ignored the commercial aspect and consciously or unconsciously tried to cover up the low steel profitability in their non-steel activities..." (quoted in Pettersson 1988, 145; author's translation).

Between 1976 and 1978, Swedish firms expanded their capacity for stainless welded tubes by 70 percent, and excess capacity began to emerge in Europe in 1976.⁸ Producers had moved on to the higher value-added tubes market when the price of stainless strip, the primary input for welded tubes, started to fall (Pettersson 1988). Fagersta and Granges-Nyby began to increase their tube capacity in 1975, and in 1976 Uddeholm followed suit, further increasing excess capacity (Pettersson 1988).

Swedish firms seemed unable to accept expansion by their competitors in Sweden. When one firm expanded, the others followed, each firm trying to

maintain its position in the industry, whatever the consequences for profitability. The expansions resulted in large economic losses for all the firms involved and large-scale capital destruction, as machinery had to be scrapped shortly after installation. Again quoting Mr. Winberg in 1976: "If one firm accomplishes something good in one field, then all the other firms soon follow and do the same thing. Some efforts have been made at coordination, but mainly on marginal issues. This is the most serious problem for the industry" (quoted in Pettersson 1988, 192; author's translation).

In 1979, Granges sold its subsidiary Granges-Nyby to Uddeholm, and the stainless steel activities of the two firms were integrated into a single new firm called Nyby-Uddeholm, a wholly owned subsidiary of Uddeholm. Helping to make this union possible was an extensive series of government loans and credit guarantees known as structural delegation loans (discussed later in the chapter). These loans enabled stainless steel firms to modernize their equipment, but they also enabled them to overinvest in stainless steel crude units, where capacity was already excessive. Crude steel production continued to be spread out over too many units (Government of Sweden 1984). As in case of welded tube, much of the superfluous equipment was taken out of operation shortly after startup. Once again, Swedish firms had demonstrated their inability to give up any part of their market to their Swedish competitors, whatever the effects on profitability.

Adjustment after 1982

By 1982, the industry was in acute financial trouble after years of negative profits (tables 9.3 and 9.4). The four remaining firms -- Avesta, Fagersta, Nyby-Uddeholm, and Sandvik -- met with government representatives to discuss the industry's future. Recognizing that profitability would have to guide their decisions if the industry was to survive, the four firms and the government agreed in January 1984 on a reorganization. The firms gave up much of their product and process identity, and two of them left the industry entirely. Two firms emerged from the reorganization: Avesta, which was totally

restructured and became the dominant firm in the industry, and Sandvik Steel, which underwent less extensive changes and became involved in joint activities with Avesta.

The following aspects of the agreement on the restructuring of the industry went into effect in 1984 (*Metal Bulletin*, January 13, 1984):

- Avesta concentrated on stainless sheet-strip and plate.
- Sandvik concentrated on stainless seamless tube, narrow-strip, and wire.
- Nyby-Uddeholm was sold to Avesta. The parent company, Uddeholm, left the stainless industry and concentrated on tool steel.
- Fagersta, once a leading producer of stainless strip and wire-rod, sold its stainless operations to Avesta and Sandvik.
- Avesta and Sandvik formed two joint companies: Avesta Sandvik Tube, which produced stainless welded tube (Avesta owned 75 percent, Sandvik 25 percent), and Fagersta Stainless, which produced stainless wire-rod (fifty-fifty ownership).

All the parties involved -- employees, union, owners, and the government -- seemed to be satisfied with the solution. Having most of the Swedish stainless steel industry concentrated in one firm, Avesta, was expected to facilitate further restructuring of the industry since decisionmaking was now in the hands of a single owner capable of assuming long-term responsibility for the industry (*Affarsvarlden*, January 25, 1984). On the international scene, Avesta was now a large stainless steel producer -- and for some products, the largest producer.

In 1984, the new Avesta had production facilities in eight locations within Sweden, including several redundant units. Most clearly in need of rationalization was the capital-intensive production of crude stainless steel, which was dispersed across four locations (*Affarsvarlden*, January 25, 1984). As the managing director of Avesta remarked in the new company's first *Annual Report* (1984): "A further restructuring within production must take place. Unnecessary plants must be closed down in order to raise capacity utilization

in the remaining plants. Many workers and regions will be affected " (author's translation).

In 1985, Avesta closed down the crude steel units from the old Fagersta company, resulting in a well-needed 25 percent reduction in Sweden's stainless crude capacity (OECD 1984). It also closed down one of its stainless strip mills (Pettersson 1988). But even after these consolidations and closures, many structural problems remained. Profitability was still relatively low in 1986, although considerably improved since the formation of the new Avesta in 1984 (table 9.4). Many of Avesta's foreign competitors had larger-scale production units and therefore lower costs. For Avesta, unifying the activities of three firms (Avesta, Nyby-Uddeholm, Fagersta) into one new stainless steel firm had not been an easy task, and production still needed to be streamlined to increase profitability. The guiding principles were increased concentration and larger scale.

In tube production, the concentration that had begun in 1984 with the formation of the Avesta subsidiary, Avesta-Sandvik Tube, was intensified in 1987, when its tube manufacturing operations in West Germany were closed down and moved to the Swedish works. In 1988, Avesta-Sandvik Tube purchased the welded-tube operations of its competitor, Mannesmann, to strengthen its world market position (Avesta 1988).

Avesta has become the largest Western⁹ producer of stainless steel cold-rolled wide sheet, hot-rolled plate, and welded stainless tubes.¹⁰ Sheet, plate, and welded tubes represent about 75 percent of Avesta's turnover (*Veckans Affärer*, March 6, 1986), a development in line with the intentions of the 1984 agreement.

Restructuring within Sandvik proceeded in parallel with that of Avesta, but along different lines. Stainless steel is only one activity among many in which Sandvik is engaged, representing less than 30 percent of Sandvik Group's total sales. By contrast, stainless steel was and remains Avesta's dominant activity. For Sandvik, the most important change following the 1984 agreement was its joint activities with Avesta.

Sandvik's steel production in 1984 was already streamlined by world standards. Sandvik had started early to shift from bulk products to more sophisticated products (*Affarsvarlden*, January 22, 1986), becoming more and more oriented toward engineering rather than steel. Because of its engineering emphasis, Sandvik, like the engineering industry generally, had been less severely affected by the crisis in the 1970s than other stainless steel firms (table 9.4). But while the Sandvik Group was in relatively good shape, its steel activities were in a more precarious position in 1983 (*Affarsvarlden*, January 22, 1986) because of their poor profit showing (table 9.4). In January 1984, Sandvik transferred its steel activities to a separate company, Sandvik Steel; steel activities showed a marked increase in profitability that year.

Stainless steel accounts for about 85 percent of Sandvik Steel's sales, with other high-grade steels accounting for the rest (*Affarsvarlden*, January 22, 1986). In both its leading fields, stainless seamless tubes and drawn-wire, Sandvik Steel strengthened its world market position after the 1984 agreement. For stainless seamless tubes, its dominant product, Sandvik Steel is the largest producer in Europe and second only to a Japanese producer in the world market (*Nordstjernen* 1984). In 1987, Sandvik bought TI Stainless Tubes, a British firm, thereby adding about 10,000 tons a year of stainless tube capacity to its 25,000 ton capacity in Sweden. According to Sandvik Steel's managing director, "We are looking at our position on the world market, and through this acquisition we will be more evenly matched with the largest Japanese manufacturer. To survive in steel you have to be one of the biggest on the market. And there is only one market: the world" (*Metal Bulletin*, December 7, 1987). In its other leading product, stainless drawn spring wire, Sandvik Steel is the world's largest producer (Sandvik 1984). In 1989, Sandvik absorbed Gunnebo AB's production of drawn-wire, further solidifying its dominance (Sandvik 1989).

Changes in profitability

For the stainless steel industry, the turn toward positive profitability came around 1982-83. Based on return on total capital, profitability for the stainless steel industry as a whole was negative over the entire crisis period of 1975-82;¹¹ by comparison, profitability in the Swedish industrial sector (mining and manufacturing) overall was positive on average during that period (table 9.3).¹² In 1984, profitability in the stainless steel industry began to reach the average level for the industrial sector as a whole and by 1987 and 1988 had exceeded it. Over the period 1980-88, profitability was stable for the industrial sector as a whole but fluctuated widely in the stainless steel industry.

Using profit margin as an indicator of profitability shows a similar trend, but with a lag of several years (table 9.4).¹³ The stainless steel industry began to show positive profit margins in 1984, and by 1986 it had caught up with the industrial sector average. By 1987 and 1988, stainless steel was performing better than that average. For the period 1980-84, average profit margins were stable in the industrial sector as a whole but showed an increasing trend in the stainless steel industry.

The Swedish government's role in the adjustment process

Just as the stainless steel firms were finally coming to terms with the importance of profitability around 1982, the Swedish government's position on economic intervention in the industry was also being reevaluated. According to the findings of the 1982 Specialty steel Investigation Commission established by the government, government stainless steel policies during the second half of the 1970s had in many ways been "violating commercial principles" (Commission Report, section II). The government decided to "terminate [its] support to the stainless steel industry as soon as possible" and to let its policies be guided by commercial principles. Thus in 1982, both the government

and stainless steel firms adopted profitability as the guide to decisions affecting the industry.

In 1984, the Swedish government ended all support to the stainless industry. It offered no new loans or credit guarantees, wrote off no more old loans, and provided no subsidies of any kind. The stainless steel firms were also told that they had to start paying back their government loans. Before the end of 1987, both Avesta and Sandvik had fully paid back the government structural loans they had received at the end of the 1970s (Eliasson and Lindgren, interviews).

Why did the government change its policy? Government fiscal problems were one reason. But more fundamentally, both government and industry had come to the realization that the industry had to manage itself, without government support. Swedish policymakers seem to have learned from their past mistakes. In many cases, government support had not really helped the industry's long-term survival and had simply delayed the needed restructuring and increased its cost. Furthermore, it was becoming apparent that government support to the industry had furnished rival producers in the United States and other countries with arguments for seeking import restraints against Swedish stainless steel. As Erik Hook, President of the Swedish Steel Producers Association, Jernkontoret, saw the issue in 1977:

An expansion based on government subsidies can be a deadly trap for export industries, if exports decrease because of protectionism -- for example, the U.S. import restrictions implemented in 1976 on stainless steel from Sweden and other countries.... With this in mind, a number of steel firms, fearful of losing their export business, refrained from seeking subsidies (quoted in Pettersson 1988, 254; author's translation).

He added in 1982:

It seems today that the managers of the Swedish steel firms have come to the conclusion that subsidies and other support to the industry does no good and that government intervention must come

to an end. However, for a firm in a difficult position, it is hard to say "No thanks!" to the support offered by the government.

Maybe we should be grateful to the Americans, not for their protectionistic trait, but rather for keeping an eye on Swedish policies and so helping us to keep to the narrow way without subsidies (quoted in Hook 1982, 9-10; author's translation).

Policy before 1982

In 1975, as the steel crisis settled in, neither the government nor the industry believed that the crisis would be as long or as deep as it proved. The objective of government policy was to bridge the gap between booms, to keep production and employment at normal rates until the cyclical downturn was over. No one realized that the high rates of growth were not going to return.

As part of this countercyclical policy, the government introduced an inventory support program in 1975 that was available to all industries. Under the program, which lasted until mid-1977, the stainless steel industry stockpiled a large part of its production of finished steel products for "later sale" (Pettersson 1988; table 9.5). If the industry maintained employment at its precrisis level, the government compensated the firms for their excess inventories at a rate of 20 percent of the capital value of the stocks in excess of normal levels. Most stainless steel firms participated in the program (OECD 1980).

When the support program ended in 1977, the accumulated steel stocks had to be sold off. Prices naturally fell, and the situation did not improve when the engineering industry and wholesalers also sold off their accumulated steel stocks. But price was not the only problem. Many of the inventories of ordinary steel had virtually rusted away since the firms did not have sufficient warehouse space to store all their stocks indoors.

In 1976, the government established a commission to investigate the acute problems of the Swedish specialty steel industry, particularly the stainless steel industry, and the possibilities for restructuring. The

government believed that the stainless steel industry could be competitive in the world market in the long run, but that it needed to modernize its production first (Specialty steel Investigation Commission 1977). Stainless steel firms would continue to do the same things in the same locations but they would do them with state-of-the-art equipment. Policymakers failed to consider the fundamental changes that had occurred in competitive conditions and so were not ready to recommend the major restructuring of the industry needed to increase profitability and secure its long-term survival on the world market.

Since firms did not have the financial resources needed to invest in new equipment, the government established the structural delegation loan program. The program offered loans and credit guarantees to firms for investments related to restructuring or to liquidity problems during an unprofitable transition period (Pettersson 1988). In 1978 and 1979, government loans and credit guarantees to the stainless steel industry totaled \$209 million (table 9.6).¹⁴ The largest share, much of it in the form of conditional loans,¹⁵ went to the formation of Nyby-Uddeholm in 1979 (Pettersson 1988).¹⁶ The loans and credit guarantees represented about 10 percent of combined sales in 1978 and 1979 of Avesta, Nyby-Uddeholm, and Sandvik (steel division), which accounted for most of the industry's sales. Of the \$209 million, \$62 million went into ten-year government loans at an interest rate of 3.75 percent above the official discount rate of the National Bank of Sweden. Of the remainder, conditional loans accounted for \$92 million and credit guarantees for \$55 million (Pettersson 1988).

The government loans and credits financed a restructuring of the stainless steel industry consisting almost exclusively of the installation of more modern production equipment. This modernization was almost indiscriminate, extending even to crude steel production, which was already plagued by excess capacity. Few of the other restructuring measures recommended by the 1977 Commission were implemented. The new commission established in 1982 argued that these heavy investments had actually hindered

the necessary restructuring of the industry. The government made no new loans or credit guarantees to the stainless steel industry after 1979.

Policy after 1982

Losses in the stainless steel industry in 1981 and 1982 were substantial (tables 9.3 and 9.4), and firms were having difficulty meeting their operating expenses. The new government commission established in 1982 reported that further adjustment was needed in the industry. The committee's guidelines on government intervention were quite restrictive. No more public funds should be made available to the industry, and ownership of the firms should remain private (no nationalization). For existing loans, only limited write-offs should be considered, in accordance with Swedish bankruptcy laws. Government policymakers were convinced that the industry had to solve its own problems and that all government support should be terminated.

Nyby-Uddeholm, with \$263 million¹⁷ in annual sales in 1983, 80 percent of it in export markets, was one of the largest European producers of stainless sheet and tube (Uddeholm 1983). But the firm had run up substantial losses since its formation in 1979 (table 9.4) and was threatening to collapse under a debt burden to the government that had reached \$139 in December 1983.¹⁸ The 1982 Commission had reported that the restructuring of the industry depended to a large extent on how Nyby-Uddeholm's financial problems were solved.

In 1983, an agreement was reached in accordance with Swedish bankruptcy laws (OECD 1984). Owners and private creditors agreed to infuse a minimum of \$43 million into Nyby-Uddeholm,¹⁹ and the government agreed to write off loans up to a value of \$43 million.²⁰ The parent company, Uddeholm, agreed to take over responsibility for repaying Nyby-Uddeholm's conditional loans totaling \$88 million. The contributions from owners and private creditors greatly exceeded those of the government, according to an article in *Dagens Nyheter* (March 30, 1983), Sweden's largest daily paper. The article argued that this financial restructuring helped to secure at least part of the

government's financial claims in the company since, according to the original terms of the loans, the conditional loans would be worthless if Nyby-Uddeholm declared bankruptcy or went into liquidation.

The assistance to Nyby-Uddeholm in 1983 was merely a stop on the way to the restructuring of the entire stainless steel industry. Not all the matters agreed on in 1983 had had time to come to fruition; some were instead included in the 1984 agreement. After a period of negotiation, the government and the four remaining firms in the industry reached an agreement in 1984 (see also the section above on industry agreement).

To enable the adjustment process to continue, the government reduced its \$182 million claims on the new Avesta company (the consolidated Avesta, Fagersta, and Nyby-Uddeholm companies) by \$59 million (including the \$43 million loan write-off to Nyby-Uddeholm). A condition of government participation was that owners and other creditors contribute at least equal shares. SE-Banken, Sweden's largest bank at the time, guaranteed at least \$39 million in new stockholding equity for the new Avesta through a public issue. Uddeholm agreed to infuse \$30 million into its old subsidiary, Nyby-Uddeholm, as new equity capital (instead of the \$23 million agreed on in 1983). Avesta, Fagersta, Uddeholm, and Sandvik were also to pay \$13 million to an investment company, which would create new jobs in the regions hurt by the restructuring (Nordstjernen 1984). As in the Nyby-Uddeholm restructuring, the contributions of owners and creditors were larger than those of the government.

The Swedish government terminated its support to the stainless steel industry after its participation in the agreement of 1984. No more loans were written off after that. Both Avesta and Sandvik paid off their structural delegation loans early, as their financial situations improved and as falling interest rates in the mid-1980s made the loans more expensive than new loans at commercial rates. By the end of 1987, all the structural delegation loans made to the stainless steel industry in the late 1970s had been fully paid back (Eliasson and Lindgren, interviews).

International policy understanding

For industrialized and industrializing countries alike, steel is more than an industry. The word "steel" has a strong political component. Steel is economic strength, the symbol of industrialization; it is the material of which bridges, cities, and manufacturing industries are built. Steel is the key to military defense (Jones 1986). A steel industry is also a source of national pride. Every country "needs" a steel industry in order to prosper, just as every country "needs" a national airline. These symbolic attributes of steel help to explain why most governments have intervened so heavily to save and protect their steel industries during times of crisis or import threats.

This was one reason why Sweden, the European Community (EC), the United States, and the other OECD countries agreed in 1979 on the need for a common set of principles covering government involvement in the steel industry (OECD 1988). The idea was to prevent governments from assisting their domestic producers to take over sales from producers in other countries. Two principles were to provide guidance:

- "Do not export your problems." Governments were not to help their domestic industries increase their world market shares through expansion based on subsidies or other government support.
- "No import restrictions." Countries were to eliminate or minimize import restraints on steel that restricted foreign sales in the domestic market.

The following sections evaluate the performance of Sweden, the EC, and the United States against these criteria and compare Sweden's performance with that of the EC and the United States.

Sweden

From the beginning of the crisis in the steel industry in 1975 up to present, Sweden's shares of world production and exports have declined (table 9.7 and 9.8). Since the Swedish stainless steel industry, whether subsidized

or not, has not expanded in the world market, Sweden cannot be said to have violated the first criterion.

As for the second rule on avoiding beggar-thy-neighbor policies by aiding local producers through import restrictions, Swedish policymakers have long been acutely aware of Sweden's dependence on trade. A large proportion of Swedish production is exported and much of its consumption is imported. Free trade is the aim of Swedish trade policy. Free trade agreements with the EC and the European Free Trade Association (EFTA) covered 95 percent of Sweden's imports of stainless steel in 1989, leaving only a marginal part of stainless steel imports subject to tariffs.²¹ And at least since the 1970s, Sweden's tariffs for stainless steel product have been lower than those of the EC and considerably lower than those of the United States (table 9.9). So with 95 percent of its imports duty-free, with low tariffs on the remainder, and with no quantitative restrictions -- no quotas, no voluntary export restraint agreements, no additional tariffs -- it follows that Sweden has not violated the "no import restrictions" criterion.

European Community

State intervention has been the norm in the European steel industry for generations.²² A multilateral dimension was added to the picture with the signing of the Treaty of Paris of 1951, which established the European Coal and Steel Community, the predecessor to the European Common Market. The goals of the treaty were mainly political -- peace and integration -- the economics was mostly French. As interpreted by Patrick Messerlin (1987), a noted French economist,

The Treaty of Paris... is the product of the antimarket ethos of France in the 1950s, which saw the economic future in terms of a reconciliation between planning and unconstrained competition.... By favoring a process of cartel formation within each country, the result of the Treaty of Paris has been the preservation of each of the national steel industries regardless of its competitive

stature, and the substitution of competition among states for competitive market forces, creating a highly unstable environment (p. 124).

As Europe moved to become one market, intense competition arose among the member states to exploit the opportunities created by the removal of internal trade barriers. State financing of new technology and capacity expansion were important dimensions of this internal competition. In 1975, steel prices within the EC fell 40 percent below 1974 prices and export prices fell 50 percent. Capacity utilization dropped from 87 percent to 66 percent, never again rising above 69 percent, and yet capacity continued to be expanded through 1980 (Tsoukalis and Strauss 1987, 195).

A central feature of the Treaty of Paris was the creation of a basing-point pricing system that had the effect of ruling out price competition within the Community. Each country's national steel cartel set its prices, and producers from other countries could not legally export to that country except at the prices set by the importing country's cartel. One objective of this collective management of the steel industry was to maintain "remunerative" prices. These prices made even inefficient plants look profitable (or at least potentially profitable, if they could achieve sufficient sales volume) and led, plant-by-plant and national cartel by national cartel, to pressures to expand output and capacity. Of course, with "remunerative" prices set considerably above the market-clearing level, there was an adding-up problem: the sum of what all producers wanted to produce was considerably above the sum of what European users wanted to buy.

One result of this excess supply was a significant expansion of European exports to the United States. Another result was the attempt to use political instruments to reduce output and capacity and to reach agreement on reductions in state subsidies -- the Spinelli, Simonet, and Davignon plans. But these political instruments were often captive to political interests. In plant closure and investment approval decisions, member state governments found it convenient to pass the buck to the EC Commission -- to side with their

industry and let the Commission take the blame for cutbacks. The Commission, still attempting to establish its authority, was reluctant to be so severe as to tempt the member state governments not to acquiesce in its decisions, so rulings on internal disputes were relatively mild. "The most important unifying factor for Community countries during the crisis was the need to preserve the common market and thus avoid the spread of national protectionist measures. Once the purely national solution was abandoned, other things immediately followed" (Tsoukalis and Strauss 1987, 216, emphasis added).

The "other things" included a Communitywide price floor, limits on imports, and collective negotiations with the outside to defend EC exports. The EC Commission augmented its control of the external dimensions of the program by establishing a license and monitoring system for imports and by instituting antidumping actions against imports priced below established base prices.

The EC's shares in both production and exports of stainless steel increased over the period 1974-89, indicating an expansion relative to the rest of the world (table 9.7 and 9.8). At the same time, the EC member countries subsidized their stainless steel industries (Jernkontoret Annual Report 1981 and Pettersson 1988). It seems, therefore, that the EC violated the "Do not export your problems" criterion by subsidizing the expansion of their stainless steel industries at other countries' expense.

United States

Throughout the 1970s and 1980s, the United States had quantitative import restrictions or additional tariffs on most stainless steel products. It has also long had voluntary export restraint agreements with most of the major stainless steel producing countries except Sweden, Canada, and Taiwan, which refused such agreements (Jernkontoret Annual Report 1987). Thus, the United States has violated the "No import restrictions" criterion. In addition, the United States has used antidumping and other unfair trade actions to further restrict imports. These actions are described in the following section.

U.S. trade remedies cases

The Swedish stainless steel industry's record of good economics and good international citizenship has not shielded it from attack by the trade remedy laws of other countries. The stainless steel industry in the United States, like the entire U.S. steel industry, has actively used various provisions of U.S. trade law to restrict import competition -- from Sweden as much as from any other country. And they have been successful. Imports from both Swedish firms, Sandvik Steel and Avesta, (including Avesta's subsidiary, Avesta Sandvik Tube), are presently under antidumping orders in the United States.

The use of trade remedies to restrict imports from Sweden is not an aberration. It is an example of the trade remedies process at work. This bit of commercial history illustrates the "shotgun approach" developed by import-competing industries in the United States (table 9.10). The strategy is to file a multitude of petitions using every provision of the trade law. The political dimension of this strategy is to publicize the industry's accusations against exporters and so to build up political pressures to do something for the industry. The complementary legal dimension is to explore the various ways "dumping," "injury," "product," and "industry" can be specified until a combination is found that the government agrees merits an affirmative determination. Dumping is whatever an industry can get the government to act against under the antidumping law.

Many cases under many legal provisions

The first U.S. unfair trade case against Swedish stainless steel was brought in 1972 against Avesta stainless steel plate. The antidumping order that resulted from the case is still in place. (*Jernkontoret Annual Report 1985*). Through the middle 1980s Avesta provided information for annual price reviews, arguing each time that the record showed no dumping by Avesta, and requesting that the antidumping order be lifted. Through these reviews Avesta did succeed in negotiating a smaller dumping margin, but did not succeed in

having the order lifted. Since 1987, Avesta has not requested a price review. In thus declining to contest the antidumping duties assessed against it, Avesta thereby avoids the legal and administrative expenses of a review.

In 1974, voluntary export restraint agreements on Japanese and European specialty steel exports to the United States expired. Immediately thereafter, the U.S. industry filed a petition for import relief under section 201 of U.S. trade law, the safeguards or escape-clause provision. Consistent with Article XIX of the GATT code, section 201 allows petitions for restrictions on imports that are injuring a U.S. industry. The fairness or unfairness of the imports is not at issue, only the matter of injury to competing U.S. production. The U.S. International Trade Commission reported an affirmative finding of injury to U.S. producers of stainless steel sheet-strip, plate, bar, and wire-rod and recommended import quotas. President Ford accepted the finding, but before imposing quotas unilaterally, he attempted to negotiate voluntary restraints with leading exporters. Only Japan complied. In June 1976, the president announced a three-year agreement with Japan and the imposition of quantitative restrictions against all other suppliers, including Sweden. The restrictions, which were extended by President Carter, remained in place until February 1980.

In 1981, the U.S. stainless steel industry filed a section 301 petition against imports from the EC, Australia, and Sweden, alleging illegal penetration of the U.S. market as a result of subsidies to domestic production. The petition covered the products that had been under quantitative restriction between 1976 and 1980. The Office of the U.S. Trade Representative opened an investigation in 1982, but before the investigation was completed, President Reagan directed that it be converted to a section 201 case -- a "fair but injurious" case instead of an "unfair trade" case (Hufbauer, Berliner, Elliott 1986, 195). The president also instructed the U.S. Trade Representative to monitor imports subject to the section 201 investigation and to continue consultations with Sweden and other countries to eliminate all trade-distorting practices. In March 1983, the International Trade Commission

returned a unanimous determination of injury, and in July 1983 the president imposed import controls for four years, retroactive to January 1983.

Quantitative restrictions were imposed on stainless steel bar and wire-rod, and increased tariffs were imposed on stainless sheet-strip and plate (Hufbauer, Berliner, Elliott 1986, 195).

In December 1985, eleven U.S. producers filed another section 301 case, this time against Swedish stainless tubes and drawn-wire, claiming that subsidized imports from Sweden had contributed to the closing down of mills and had increased unemployment in the United States. The Swedish authorities and the firms involved held the position that the accusations had no solid basis. Before the U.S. Trade Representative had decided whether to investigate the claim, the U.S. firms withdrew their petition. Almost immediately, the U.S. producers filed a new section 301 petition, similar in content to the previous one, but more sharply drawn. This petition was also withdrawn (in March 1986) shortly after the U.S. Trade Representative had agreed to start negotiations with the Swedish counterparts and before a decision had been reached on whether to undertake an investigation (Jernkontoret Annual Report 1985). A third 301 petition was submitted, virtually identical to the previous one. The U.S. Trade Representative declined to open an investigation, however, on grounds that the matter was being handled by the countervailing duty and antidumping cases that the U.S. industry was pursuing simultaneously.²³

In the countervailing duty case, the Department of Commerce reached an affirmative preliminary determination, finding a subsidy margin of 2.18 percent on the exports of Avesta-Sandvik Tube. However, in March 1987, the International Trade Commission concluded that the tube imports had not injured the U.S. industry, and the import price monitoring and deposit requirement resulting from the preliminary determination were revoked.

In the antidumping case against Swedish stainless tubes, the International Trade Commission ruled that imports from Avesta-Sandvik Tube (welded tubes) had not injured the U.S. industry but that dumped imports from Sandvik Steel (seamless tubes) had caused such injury. The Commerce Department

imposed an antidumping duty of 20.47 percent on Sandvik Steel's seamless tube sales in the United States.

U.S. producers appealed the negative injury finding in the welded tubes case to the U.S. Court of International Trade. The Court found procedural errors in the International Trade Commission's investigation and asked for reconsideration of the case. This time, the International Trade Commission returned an affirmative finding of injury. Since December 1990, an antidumping order and an antidumping duty of 34.5 percent have been in effect against Avesta-Sandvik Tube's welded tube imports (*American Metal Market*, December 5, 1990; *Metal Bulletin*, August 13, 1990). The duty effectively halted all exports to the United States. According to Goran Kullman, marketing director of Avesta-Sandvik Tube, "After the U.S. antidumping duty was imposed in the beginning of December, we completely stopped the stainless welded tube deliveries from Sweden to the United States. The high duty of around 35 percent makes exports impossible" (interview, January 1991).²⁴

The Sandvik Steel antidumping case

A closer examination of the Sandvik Steel antidumping case is instructive for its illumination of the workings of the national and international antidumping machinery, with its procedures for all seasons and all reasons. That machinery is not designed to sift the evidence for the correctness or incorrectness of a disputed activity in any rational business or economic sense. Rather, it is designed to shift its procedural gears until the right one is found that will move the process along to an affirmative finding of dumping and injury.

In October 1986, six U.S. specialty steel firms filed a dumping claim against imports of stainless steel welded tubes from Avesta-Sandvik Tube and seamless tubes from Sandvik Steel. In a preliminary determination in November 1986, the International Trade Commission found that the imports had caused or threatened to cause injury to the U.S. industry. In May 1987, the Commerce Department made a preliminary affirmative determination of dumping and imposed

preliminary duties between 31.46 percent and 60.65 percent. In the Department's final determination in October, duties were calculated at 26.46 percent for Sandvik Steel and 34.5 percent for Avosta-Sandvik Tube (GATT 1988a). As noted above, the International Trade Commission found that only imports from Sandvik Steel (seamless tubes) had caused injury to U.S. producers. After corrections were made for technical errors brought to the attention of the Commerce Department by Sandvik Steel and the petitioners (GATT 1990), the duty on Sandvik Steel's tubes was set at 20.47 percent, and definitive antidumping duties at that rate were imposed in December 1987 (GATT 1988b).

Sweden contended that the imposed duty was not in accordance with the provisions of the GATT Antidumping Code and requested consultations with U.S. authorities, which were held in July 1988. After failing to reach an acceptable solution, Sweden referred the case to the GATT Antidumping Committee in September 1988 (GATT 1988a). Sweden argued that the U.S. investigation had not demonstrated a causal link between dumping and injury to U.S. industry, pointing out that Sweden's exports to the United States had actually declined during (and since) the period in which the U.S. investigation had found dumping. Sweden's brief also raised a number of other points, relating mainly to technical and procedural matters. Chief among them was the discrepancy between the time period covered by the injury investigation and that covered by the dumping investigation.

The GATT Antidumping Committee held a special meeting in October 1988 to consider Sweden's position. When the committee was unable to reach a solution satisfactory to both Sweden and the United States, Sweden requested that the committee convene a panel to investigate the case. The panel was established in January 1989, despite procedural objections from the United States (GATT 1989b). This was only the third occasion since GATT's formation in 1947 that an antidumping complaint had been appealed to a GATT panel.

In August 1990, the panel reported its finding that the antidumping duties on Swedish stainless tubes violated Article V of the GATT Antidumping

Cede because the U.S. investigation had been initiated before verification that the petitioners represented the U.S. industry. The panel report recommended that the antidumping order be lifted, but the GATT Antidumping Committee, which has authority over such disputes, has not yet ruled on the panel's recommendation because the United States has blocked the report from the committee's agenda.

No economic or business logic to unfair trade actions

The point of this discussion is not to argue that the United States is correct or that Sweden is, but rather to illustrate that "correct" has no meaning other than an arbitrary one. An antidumping investigation is a collection of technicalities with no overriding economic or business logic. The parties involved win or lose on procedural technicalities.

Step by step, the U.S. investigations of dumping and of injury followed the U.S. rules. But the investigation of dumping covered July-December 1986, while the investigation of injury found that imports from Sweden had increased in 1983 and 1984 but had decreased thereafter. The implicit logic of the affirmative determinations that resulted from these investigations was that cause came after effect. The GATT panel chose not to take up this point and focused instead on a procedural detail. They found the U.S. investigation to be faulty because of the timing of the U.S. government's examination of the petitioners' standing to represent the relevant U.S. industry. (The panel did not question the "how" or the "if" of this matter, only the "when.")

Sweden's experience with U.S. trade remedies illustrates one further point. The cases themselves are only skirmishes in a continuous legal-administrative campaign. The reader should not presume that once a case is decided, the accused exporter can discharge legal counsel and go back to the business of producing and selling -- burdened perhaps by a new restriction, but at least knowing precisely what that restriction is.

Less than a year after President Reagan imposed the 1983 restrictions under section 201, the U.S. industry complained that production protected by

increased tariffs was disadvantaged relative to production protected by quantitative restrictions and asked that quotas be substituted for the tariffs. This meant another round of investigations and consultations. Likewise, the petitioner in the 1986 antidumping investigation was not deterred by the U.S. International Trade Commission's 1987 finding of no injury to U.S. welded tube producers. The petitioner went almost immediately to the Federal court and after two years' persistence achieved a reversal of the decision. Thus "victory" in the skirmish at the U.S. International Trade Commission in 1987 did not end the Swedish welded tube exporter's engagement in the legal battle, and it did not reduce the uncertainty the Swedish exporter faced in the terms and conditions under which it could do business in the United States.

That uncertainty includes the added risk in the U.S. market posed by the threat of antidumping actions. The threat itself may be sufficient to reduce exports to the United States. The managing director of a Swedish specialty steel firm commented in April 1991 that because of the increased risk of falling under a U.S. antidumping order, the firm's strategy in recent years has been to downplay its efforts to penetrate the U.S. market. The risk of an antidumping action is viewed as an increased cost that reduces the profitability of the U.S. market compared to other, less protectionist countries.

Conclusion

The main lesson of this chapter is that good economics, international competitiveness, private ownership, and limited support from a government demonstrating good international citizenship are not enough to defend an industry against the application of antidumping or other import-restricting policy.

The Swedish stainless steel industry responded to the world crisis in the steel market in the 1970s with a major restructuring of the industry. By

whole-heartedly applying the principle of profitability to decisionmaking, the industry transformed itself into a healthy, internationally competitive industry. Today, the two remaining stainless steel firms in Sweden are among the world leaders in their fields and are the world's largest producers of some stainless steel products.

During this transformation, stainless steel firms also learned to get along without government intervention. After 1982, the government's policy toward the industry changed. The government ended all direct support to the industry in 1984, and by the end of 1987, stainless steel firms had paid back all of their structural delegation loans dating from the late 1970s. In addition, the Swedish government, in its compliance with OECD criteria guiding national steel policy, demonstrated better international citizenship than either the United States or the European Community. The negative findings of the U.S. countervailing duty and section 301 cases against Sweden offered further support that the Swedish government's role in the stainless steel industry was clearly within the bounds of the international understanding of what that role should be.

Producers in the United States, meanwhile, were shopping around for ways to restrict imports of Swedish stainless steel products. They actively sought protection under every available provision of U.S. trade laws (table 9.10). Efforts under section 301 and countervailing duty laws failed, but their claims under section 201 resulted in the imposition of quotas and additional tariffs covering most stainless steel products for over ten years. Those under antidumping provisions resulted in the imposition of duties that are still in effect for stainless steel plate (Avesta), welded tubes (Avesta-Sandvik Tube), and seamless tubes (Sandvik Steel). This extensive use of trade remedies cases against Swedish stainless steel is not an aberration, but rather an illustrative example of how the system generally works.

On the Sandvik Steel antidumping case, Sweden complained to the GATT, which established an antidumping panel to investigate the case. The panel's recommendation that the antidumping order be lifted was based not on a

consideration of the broad issue of whose position was right from a rational economic or business perspective, but on the procedural detail of when the U.S. government had verified that the petitioner represented the industry allegedly being harmed by the alleged dumping. Just as "dumping" is whatever a domestic industry can get its government to act against under antidumping law, so "not dumping" is whatever a GATT panel cites as grounds to discredit an antidumping order.

Notes

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1. Measured at the crude steel stage (tonnage) for the entire steel industry (Fritz 1988).

2. It should also be noted that the process for making stainless steel improved considerable in the 1970s and 1980s. Less crude steel was needed to produce a given quantity of finished stainless steel -- the decrease in production of finished products was smaller than the decrease in production of crude steel. Only crude steel statistics are available (Jernkontoret).

3. While this figure is for the entire specialty steel sector, employment in the stainless steel industry, which accounted for about half the sector's sales, is estimated to have followed a similar trend (Jernkontoret 1989).

4. Capacity utilization (actual production as a percentage of potential production) in the Swedish steel industry fell from an internationally high level of 86 percent in 1974 to 56 percent in 1977 (Pettersson 1988).

5. Production line refers to the number of machines in one location that together perform a task, such as making wire-rod from crude or semifinished stainless input.

6. Data for the entire specialty steel industry, of which stainless constitutes around half and is estimated to have followed a similar trend (Jernkontoret 1989).

7. Stora-Kopparberg closed down its stainless division in the mid-1970s.

8. After the expansion, Sweden had about 10 percent of world capacity in welded tube production (excluding the Eastern bloc, for which comparable data are not available).

9. Comparable data are unavailable for the Eastern bloc.

10. Including the majority-owned AST company.

11. Estimated by Jernkontoret. Data for the years before 1980 are not shown in table 9.3 because reliable data are unavailable for the stainless steel firms that were parts of larger groups -- Sandvik, Nyby-Uddeholm, Fagersta, and before 1979, Granges-Nyby and Stora-Kopparberg.

12. See Naringslivets Ekonomifakta (1989) for information covering the whole period.

13. Data on Fagersta's stainless steel division and on Granges-Nyby could not be included in table 9.4 since both were parts of larger diversified groups, and financial statistics were not available by divisions or subsidiaries. Therefore, table 9.4 contains data on the stainless steel industry as a whole only for 1984-88. Fagersta's stainless division is, however, included in table 9.3, which makes it possible to present industry data covering a longer period.

14. All monetary amounts in this chapter have been converted from Swedish krona to U.S. dollars, using the average yearly selling rate provided by the Swedish National Bank. The rate used for the structural delegations loans discussed later in the chapter is the average for 1978-79.

15. The interest rate on conditional loans was equal to that on industrial bonds. Loan repayment did not have to begin until the firm started to make a profit, although interest was calculated from the first day of the loan (Jernkontoret internal document, 1980).

16. The \$209 million includes the \$57 million in conditional loans that were written over to Nyby-Uddeholm from its parent company Uddeholm in 1979. Uddeholm had received \$136 million in conditional loans in 1977, but only \$57 million applied to stainless steel activities (Government of Sweden 1984).

17. From 1978-79 to 1983, the U.S. dollar increased sharply against the Swedish krona (SKr), which affects comparisons over time of krona converted into dollars. The 1978-79 average exchange rate was US\$1 = 4.4 SKr; the rate in 1983 was US\$1 = 7.7 SKr. The 1983 exchange rate is used for all conversions in the discussion of loans to Nyby-Uddeholm and the Stainless Steel Agreement of 1984.

18. Conditional loans constituted 63 percent, "normal" loans (interest rate of 3.75 percent above the official discount rate of the National Bank of Sweden, repayment within ten years) 26 percent, and credit guarantees, 11 percent (Government of Sweden 1984).

19. Nyby-Uddeholm's parent company, Uddeholm, agreed to infuse \$23 million in new equity capital in Nyby-Uddeholm, which had only about \$4 million in equity capital at the time. Granges (parent of the old Granges-Nyby company) agreed to pay \$7 million to Nyby-Uddeholm, as an exchange of earlier claims relating to the Nyby-Uddeholm formation 1979. The SE-Banken, Sweden's largest bank at the time, agreed to guarantee a public issue of new equity capital (*Dagens Nyheter*, March 30, 1983).

20. Swedish bankruptcy laws apply to all creditors, public and private. The government's role in these agreements indicated that it had shifted from interventionist policies to a reliance on commercial principles.

21. Only 0.9 percent of imports came from the United States. And according to the Swedish Steel Producers Association, Jernkontoret, U.S. stainless steel producers do not consider Sweden -- or Europe generally -- a relevant export market.

22. The best source on support to the steel industries in the EC and its member countries is Meny and Wright (1987).

23. *Semiannual Report to Congress*, July-December 1985, as required by section 306 of the Trade Act of 1974.

24. Avesta's U.S. subsidiary purchased Armco's tube mill in Florida in July 1990, just in time to soften the impact of the high antidumping duties on welded tube exports to the United States (*Metal Bulletin* August 13, 1990). It would be interesting to investigate whether a positive relationship exists between a country's use of antidumping actions and foreign direct investment in that country.

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Table 1 Number of firms controlling the Swedish stainless steel industry, 1974, 1979, and 1984

<i>Year</i>	<i>Number of firms</i>	<i>Firms</i>
1974	6	Avesta, Fagersta, Granges-Nyby, Sandvik, Stora-Kopparberg, Uddeholm
1979	4	Avesta, Fagersta, Nyby-Uddeholm, Sandvik
1984	2	Avesta, Sandvik Steel

Source: Jernkontoret.

Table 2 Number of firms and production lines producing total Swedish output of each stainless steel product, 1974 and 1984

<i>Stainless product</i>	<i>1974</i>		<i>1984</i>	
	<i>Firms</i>	<i>Lines</i>	<i>Firms</i>	<i>Lines</i>
Plate	3	3	1	2
Sheet-strip	4	4	1	3
Bar	3	3	1	1
Wire-rod	3	3	1	1
Welded tubes	5	5	1	3

Source: Pettersson (1988).

Table 3 Profitability: Return on total capital in the Swedish stainless steel industry compared with the industrial sector average, 1980-88
(profits as a percentage of total capital)

<i>Industry</i>	<i>1980</i>	<i>1981</i>	<i>1982</i>	<i>1983</i>	<i>1984</i>	<i>1985</i>	<i>1986</i>	<i>1987</i>	<i>1988</i>
Stainless steel industry ^a	-1.5 ^b	-6.2 ^b	-1.0	4.1	9.4	7.0	3.8	11.7	20.8 ^c
Industrial sector average ^d	7.0	6.5	8.3	10.4	10.5	9.4	7.8	7.9	8.5

Note: Profits inclusive of planned depreciation and financial revenues and excluding financial costs and taxes. Total capital includes equity plus debt.

a. Data for 1980-83 include Avesta, Fagersta, Sandvik, and Nyby-Uddeholm; data for 1984-88 include the new Avesta (including Avesta-Sandvik Tube), Sandvik, and the Avesta-Sandvik jointly owned Fagersta Stainless. No pre-1980 figures are provided because data on stainless steel operations could not be separated from data on total steel operations for some companies. Jernkontoret estimates that profitability for the stainless steel industry was negative in 1975-79.

b. Profits are based on depreciation according to cost estimates instead of plans.

c. Much of the increase in profitability was due to the increased value of inventories following a sharp increase in nickel prices. Excluding this nickel effect (except for Sandvik), profits would have been about 15 percent.

d. The average for all Swedish mining and manufacturing firms. Profitability during 1975-79 was between 3.8 percent and 6.8 percent.

Source: Jernkontoret and Naringslivets Ekonomifakta (1989).

Table 4 Profitability: Profit margin in the Swedish stainless steel industry compared with the industrial sector average, 1975-88
(profits as a percentage of total net sales)

<i>Firm/ Industry</i>	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988 ^a
Avesta ^b	0.7	-1.6	-5.9	-2.9	3.8	1.8	-12.4	-7.9	-1.2	1.4	1.1	4.6	6.6	17.1
Sandvik ^c	8.5	5.3	-0.1	-2.8	1.3	6.5	0.2	-0.2	-6.3	6.9	6.2	6.1	6.9	12.7
Nyby- Uddeholm ^d	..	..	..	..	-7.6	-9.1	-8.6	0.5	3.2	..	..	..	..	..
Stainless steel industry ^e	..	..	..	..	..	..	..	..	..	3.6	3.3	5.2	6.7	15.3
Industrial sector average ^f	4.8	2.7	-0.4	0	3.2	3.4	1.5	2.9	6.2	6.8	6.1	5.3	6.1	6.7

Note: Profits inclusive of planned depreciation and financial revenues/costs and exclusive of taxes.

a. Much of the large increase in profits was due to a rise in inventory values following the sharp increase in nickel prices.

b. Data for 1984-88 are for the new Avesta (including Avesta-Sandvik Tube).

c. Data for 1975-83 are for the steel division of the Sandvik Group; those for 1984-88 are for Sandvik Steel, a separate company.

d. Nyby-Uddeholm, a separate company in 1979-83, was absorbed by Avesta in 1984. Profit calculation excludes financial revenues/costs.

e. Data for the stainless steel industry cover Avesta (including Avesta-Sandvik Tube) and Sandvik. The industry's profits were not calculated for the period before 1984 because data for Nyby-Uddeholm and for Avesta/Sandvik are not comparable and data were unavailable for Fagersta's stainless steel division or for Granges-Nyby.

f. Average for all Swedish mining and manufacturing firms.

Sources: Avesta (1975-88), Sandvik (1975-88), Nyby-Uddeholm (1979-80), Uddeholm (1981, 1983), and Naringelivets Ekonomiska (1989).

Table 5 Inventories of finished steel products in Sweden, 1974-79
 (year-end, thousands of metric tons)

<i>Sector</i>	<i>1974</i>	<i>1975</i>	<i>1976</i>	<i>1977</i>	<i>1978</i>	<i>1979</i>
Steel producers	579	772	924	762	563	533
Engineering industry	765	788	784	705	655	639
Steel wholesalers	291	233	295	240	191	190
Total	1,635	1,793	2,003	1,707	1,409	1,362

Source: OECD (1980)

Table 6 Swedish government loans and credit guarantees to stainless steel firms, 1978-79
(millions of U.S. dollars)

<i>Firms</i>	<i>Loans^a</i>	<i>Conditional loans^b</i>	<i>Credit guarantees</i>	<i>Total</i>	<i>Sales^c</i>
Avesta	12	0	27	39	543
Fagersta	7	0	0	7	na
Granges- Nyby ^d	3	13	11	27	na
Nyby- Uddeholm	32	79	17	128	349
Sandvik (Steel division)	8	0	0	8	808
Industry total	62	92	55	209	1700 ^e

na indicates that data were unavailable.

Note: Krona (SKr) were converted to dollars at the average exchange rate for 1978-79 (US\$1 = 4.4 SKr).

a. Ten-year loans at 3.75 percent above the official discount rate of the National Bank of Sweden.

b. Interest rate equal to that on industrial bonds; repayment of loans starts after the firm begins to make a profit, although interest is calculated from the first day of the loan.

c. For Avesta and Sandvik (steel division), covers sales in 1978 and 1979; for Nyby-Uddeholm, covers sales in 1979 only (its first year of operation). Disaggregated data on stainless steel sales were unavailable for Fagersta and Granges-Nyby.

d. Granges-Nyby ceased to exist as a firm in 1979.

e. Includes Avesta, Nyby-Uddeholm, and Sandvik's steel division.

Sources: Pettersson (1988), Government of Sweden (1984), Avesta (1978, 1979), Nyby-Uddeholm (1979), and Sandvik (1978, 1979).

Table 7 World shares of crude stainless steel production, 1974-89
(percentage of production in tons)

Country	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989
Sweden	8	9	7	5	5	6	6	5	5	5	5	6	5	5	5	4
European Community ^a	28	29	30	31	32	31	32	32	33	31	32	31	32	32	33	32
United States	29	22	24	26	26	26	22	25	18	23	20	19	19	20	19	17

Note: Excluding production in Eastern Europe, the Soviet Union, and China. Percentage shares of production in tons, since no internationally comparable figures are available for production value.

a. France, West Germany, Italy, Spain, and the United Kingdom.

Source: Inco (1981, 1990)

Table 8 World shares of stainless steel exports of tubes and finished and semifinished products
(percentage of exports in tons)

Country	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989
Sweden	18	17	13	12	12	11	10	9	9	8	8	7	8	7	7	7
European Community ^a	43	45	36	43	47	49	48	51	52	52	54	56	55	54	52	53
United States	8	5	4	4	3	3	5	3	2	2	1	2	1	2	2	2

Note: Excluding production in Eastern Europe, the Soviet Union, and China. Percentage shares of exports in tons, since no internationally comparable figures are available for production value.

a. France, West Germany, Italy, Spain, and the United Kingdom.

Source: Inco (1981, 1990)

**Table 9 Import tariffs for stainless steel products in 1990
(percentages)**

<i>Category</i>	<i>Sweden</i>	<i>European Community</i>	<i>United States</i>
Semifinished products	3.2	3.2	5.2
Finished products ^a	5.0	6.0	10.0 ^b
Tubes	7.0	10.0	7.6

Note: For standard quality and dimensions. Tariffs may differ for some special varieties. Tariffs are those established at the GATT Tokyo Round in 1979.

a. Plate, sheet-strip, bar, rod, and wire.

b. Estimate; the United States has a wide range of tariffs.

Sources: Tullverket (1990), European Commission (1990), and International Trade Commission (1990).

Table 10 U.S. trade remedies cases against Swedish stainless steel producers, 1972-87

<i>Year^a</i>	<i>Type of case</i>	<i>Stainless steel product</i>	<i>Outcome of case</i>
1972-73	antidumping	plate	positive; still in effect
1974-76	section 201	sheet-strip, plate, bar, wire-rod	quota (to 1980)
1975-76	section 201	drawn-wire	negative
1981-82	section 301	sheet-strip, plate, bar, wire-rod	negative; withdrawn (1983)
1982-83	section 201	sheet-strip, plate, bar, wire-rod	additional tariff for sheet-strip and plate; quota for bar and wire-rod (to 1989)
1985-86	section 301	drawn-wire, tubes	withdrawn by petitioners
1986	section 301	drawn-wire, tubes	withdrawn by petitioners
1986	section 301	drawn-wire, tubes	negative
1986-87	countervailing duty	tubes	negative
1986-87	antidumping	tubes	positive for seamless tubes, still in effect; negative for welded tubes
1987-90	antidumping	tubes	positive for welded tubes; still in effect

a. From the year the case was initiated to the year the outcome was announced.

Sources: *American Metal Market* (1990); Hufbauer, Berliner, and Elliott (1986); and Jernkontoret (1976, 1981-83, 1985-87 and interviews).

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